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Patent claims

- 5 1. A device for forming a peripherally closed hollow  
profiled element by means of fluidic internal high  
pressure, with an internal high pressure forming  
die, in the forming space of which the hollow  
10 profiled element can be laid, with at least one  
axial plug for sealing off the hollow profiled  
element at the end face, said axial plug  
possessing an axial passage duct supplying  
pressure fluid, the axial plug having a sealing  
15 body which possesses on its end face a trough-like  
depression, the peripheral wall of which can be  
spread open radially elastically, within the  
hollow profiled element, by means of pressure  
fluid, until said wall comes to bear sealingly  
20 against the inner wall of the hollow profiled  
element, characterized in that the axial plug (4)  
has a plug head (8) which is rigidly connected to  
the remaining plug body (9) and can be pushed into  
the hollow profiled element (1) and which is  
25 formed by an annular collar (10) and a narrowed  
extension (11) adjoining the latter toward the end  
face (7) of the head (8), in that the sealing body  
is a sealing ring (17) which is pushed onto the  
extension (11) and fixed there, the margin (28) of  
30 the annular collar (10) projecting peripherally  
beyond the outside (27) of the sealing ring (17)  
at at least one point in the radial direction, and  
in that the axial plug (4) has, on its plug body  
(9), a radial peripheral stop for bearing against  
35 the closing edge (12) of the hollow profiled  
element end (13).
2. The device as claimed in claim 1, characterized in  
that the margin (28) of the annular collar (10)

narrows conically toward the end face (7) of the plug head (8).

3. The device as claimed in either one of claims 1  
5 and 2, characterized in that the sealing ring (17) is supported on the end face (18) of the annular collar (10).
4. The device as claimed in one of claims 1 to 3,  
10 characterized in that the sealing ring (17) is supported on its depression bottom (23), in the direction of the end face (7) of the plug head (8), by means of a positioning ring (24) which is embedded in a groove (25) of the extension (11).  
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5. The device as claimed in claim 4, characterized in that a spacer ring (26) is arranged between the positioning ring (24) and the depression bottom (23) of the sealing ring (17).  
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6. The device as claimed in one of claims 1 to 5, characterized in that an annular bead (31), which projects radially beyond the entire annular collar (10) of the plug (4), is formed on the outside  
25 (27) of the sealing ring (17).
7. The device as claimed in one of claims 1 to 5, characterized in that the outside (27) of the sealing ring (17) has incorporated in it, near its  
30 end face (19) facing away from the annular collar, a peripheral groove (32) which receives a retaining ring (33) possessing an elasticity identical to or deviating from that of the sealing ring (17).  
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8. The device as claimed in one of claims 1 to 7, characterized in that a circular centering plate (34) provided with eccentric passage bores (36)

and projecting peripherally beyond the sealing ring (17) radially is arranged, with a central lead through (35), on the extension (11), so as to precede the sealing ring (17) toward the end face (7) of the plug head (8).